

**AMENDMENTS TO THE CLAIMS**

Please amend the claims as follows:

1. (Previously presented) A method of nucleic acid transfer comprising the following steps (a) and (b):
  - (a) contacting a nucleic acid with a cell in a medium; and
  - (b) following the step (a), adding a volume of a high-concentration solution of calcium chloride into the medium of (a), wherein the final concentration of calcium chloride in the medium of step (b) is within the range of 7.1mM- 30.1mM.
2. (Original) The method of nucleic acid transfer according to claim 1, wherein the nucleic acid is a single-stranded DNA, a double-stranded DNA, a single-stranded RNA, a double-stranded RNA, an oligonucleotide or a ribozyme.
3. (Original) The method of nucleic acid transfer according to claim 2, wherein the double-stranded DNA or the double-stranded RNA is in the linear or cyclic form.
4. (Canceled)
5. (Previously presented) The method of nucleic acid transfer according to claim 2, wherein the oligonucleotide is a deoxyribonucleotide, a ribonucleotide, a phosphorothioate oligodeoxynucleotide, a 2'-O-(2-methoxy)ethyl-modified nucleic acid (2'-MOE-modified nucleic acid), a small interfering RNA (siRNA), locked nucleic acid (LNA), a peptide nucleic acid (PNA) or a morpholino antisense nucleic acid.
6. - 7. (Canceled)
8. (Previously presented) The method of nucleic acid transfer according to claim 1, wherein the concentration of the high-concentration solution of calcium chloride to be contacted with the medium obtained in the step (a) is within the range of 0.1 M - 3.0 M.

9. (Previously presented) The method of nucleic acid transfer according to claim 8, wherein the concentration of the high-concentration solution of calcium chloride to be contacted with the medium obtained in the step (a) is within the range of 0.5 M - 2.0 M.

10. (Previously presented) The method of nucleic acid transfer according to claim 1, wherein the volume of the high-concentration solution of calcium chloride to be contacted with the medium obtained in the step (a) is within the range of 1  $\mu$ L - 20  $\mu$ L per 500  $\mu$ L of the medium of step (a).

11. (Previously presented) The method of nucleic acid transfer according to claim 10, wherein the volume of the high-concentration solution of calcium chloride to be contacted with the medium obtained in the step (a) is within the range of 2  $\mu$ L - 10  $\mu$ L per 500  $\mu$ L of the medium of step (a).

12. - 21. (Canceled)

22. (new) A method of nucleic acid transfer comprising:

- (a) adsorbing a nucleic acid onto the surface of a cell culture vessel;
- (b) contacting the cell culture vessel surface having the nucleic acid adsorbed thereupon with a cell in a medium; and
- (c) following the step (b), adding a volume of a high-concentration solution of calcium chloride into the medium, wherein the final concentration of calcium chloride in the medium is within the range of 7.1mM- 30.1mM.

23. (new) The method of claim 22, wherein the nucleic acid is adsorbed to the surface of the cell culture vessel by adding an aqueous solution of the nucleic acid to the vessel and drying the solution onto the surface.

24. (new) A method of nucleic acid transfer comprising:

- (a) contacting a cell culture vessel surface having a nucleic acid adsorbed thereupon with a cell in a medium; and

(b) following the step (a), adding a volume of a high-concentration solution of calcium chloride into the medium, wherein the final concentration of calcium chloride in the medium is within the range of 7.1mM- 30.1mM.